State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-21-163

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

CUMMINS ENGINE COMPANY, INC.

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That the following Cummins Engine Company, Inc. 1996 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Compressed Natural Gas or Liquid Natural Gas (CNG or LNG)

Engine Family	<u>Liters</u>	(Cubic Inches)	Exhaust Emission Control Systems and Special Features
TCE611EBCARW (433E)	10	611	Charge Air Cooler Turbocharger Powertrain Control Module Heated Oxygen Sensor

Engine models and codes are listed on attachments.

The following are the certification exhaust emission standards for this engine family in grams per brake-horsepower-hour:

Non-Methane Carbon Hydrocarbons Monoxide		Nitrogen Oxides	<u>Particulates</u>
1.2	15.5	5.0	0.10

The following are the certification exhaust emission values for this engine family in grams per brake-horsepower-hour:

Engine	Non-Methane	Carbon	Nitrogen	Particulates
<u>Family</u>	Hydrocarbons	<u>Monoxide</u>	Oxides	
TCE611EBCARW (433E)	1.1	11.2	3.5	0.06

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this 27 day of June 1996.

Assistant Division Chief Mobile Source Division

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199<u>6</u> AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL-STANDARD ENGINES

Manufacturer Cu	mmins Engine C	ompany. Inc. E	ngine Family	(433E) TCE61	1EBCARW		
Displacement:	<u>/ 10</u> I	Liters		•	/ 611	Cubic Inches	
Maximum Rated Power: 300 HP @ 2100 RPM Engine Configuration: I-6							
Ignition: Compression Compression with Glow Plug Spark_X							
Fuel Type(s): Dec	dicated	Flex-Fuel	Dual-Fuel_	Diesel_	M100_	M85_	
		CNG <u>X</u> L	NG <u>X</u> LPG_	_ Other (sp	ecify)		
Diesel Cert Fuel: 13 CCR 2282 40 CFR 86.1313-90 40 CFR 86.1313-					86.1313-94		
Primary Intended	Service Class: L	.HD	MHD_	нн	<u>X</u>	Urban Bus_	
Exhaust ECS (include MFI, TC, CAC): HO2S, PCM, (TC, CAC) (use abbreviations per SAE J1930 SEP91)							
Engine Model (Eng Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm3 / stroke (lbs/hr)	Fuel Pump & Injector Part No.	ECM/PCM Part No.	EGR Valve Part No.	PTOX / Catalytic Converter Part No.	
L10-300G (2110)	300 @ 2100	-	N/A	3922724	N/A		
L10-280G (2110)	280@ 2100		N/A	3922724	N/A		
Date Issued: Revisions:			1				